

I. THE CLAIMS DEFINE PATENTABLE SUBJECT MATTER

The Office Action rejects: (1) claims 25-39 under 35 U.S.C. §103 as unpatentable over U.S. Patent No. 5,200,847 to Mawatari in view of U.S. Patent No. 5,278,682 to Niki; and (2) claims 13-15, 18-22, 24-46 and 50-55 under 35 U.S.C. §103 as unpatentable over U.S. Patent No. 5,076,667 to Stewart in view of Niki. These rejections are respectfully traversed.

Applicants respectfully submit that Niki, either alone or in combination with either Mawatari or Stewart, fails to teach or suggest each and every feature as set forth in the claimed invention. In particular, Mawatari at least fails to disclose a driver circuit enclosed by a sealing member, as set forth in independent claims 25, 30, 35, 40, 41, 42, 43, 44 and 56. In addition, Niki and Stewart at least fail to teach or suggest an inlet for injecting the liquid crystal between a first substrate and a second substrate, wherein the inlet is provided to the sealing member and on a side edge of the first substrate and the second substrate, as set forth in independent claims 25, 30, 35, 40, 41, 42 and 56.

The present invention relates to an active matrix type display device comprising an active matrix circuit and a driver circuit over the same substrate. In particular, independent claims 25, 35, 40, 42 and 56 include a sealing member which encloses an active matrix circuit and a driver circuit, and an inlet for injecting a liquid crystal at a location in which no driver circuit is disposed. By utilizing this structure, for example, the driver circuit in claims 25, 35, 40, 42 and 56 can avoid damage brought upon by static electricity due to liquid crystal flow.

Independent claims 30, 35, 41 and 42 include a feature whereby the electrical connection between the driver circuit and an electrical element of an opposed substrate is established by a silver paste or an electrically conductive spacer.

Independent claims 43, 44 and 56 include a feature whereby a driver circuit is provided on the opposed substrate.

In contrast, Mawatari fails to disclose a driver circuit enclosed by a sealing member, as set forth in independent claims 25, 30, 35, 40, 41, 42, 43, 44 and 56. Applicants respectfully submit that the driver circuit in Mawatari is configured significantly different than that in the present application. For instance, Mawatari's driver circuit cannot be enclosed by the sealing member because the driver circuit is secured by a driver element securing resin (col. 6, lines 65-

68) and because the driver circuit in Mawatari is installed on the line lead-out end of the glass substrate (col. 8, lines 14-19). Niki fails to make up for the deficiencies found in Mawatari because Niki also fails to teach or suggest a driver circuit enclosed by a sealing member, as set forth in independent claims 25, 30, 35, 40, 41, 42, 43, 44 and 56.

The Office Action asserts that Niki discloses an inlet port for injecting a liquid crystal material at an aligned side of substrates. The Office Action attempts to use Niki in combination with Stewart in order to show the claimed features as set forth in claims 25, 30, 35, 40, 41, 42, 43 and 44. However, Stewart fails to disclose substrates aligned at the edges because Fig. 1 in Stewart shows only a top view and Fig. 2 omits a side edge of substrates 11a and 11b. In addition, Stewart's specification is silent about substrates aligned at the edges.

Furthermore, the Office Action asserts that Stewart discloses a resin material covering the driver circuit. However, Applicants have failed to find such a description in Stewart and the Office Action has failed to cite any support found in Stewart for such an assertion.

The Office Action also contends that the use of silver paste to connect electrodes is considered conventional. However, Applicants respectfully submit that the Office Action has failed to cite a reference on the record indicating that the use of silver paste to connect electrodes is conventional. Applicants respectfully request such a reference.

Furthermore, Stewart fails to teach or suggest the concept of employing an inlet port, as set forth in the present application. As such, applicants respectfully submit that there is no motivation in either Stewart or Niki to combine these two references.

Applicants respectfully submit that one of ordinary skill in the art would not have been motivated to combine the teachings of Niki with the Stewart system because there is no teaching or suggestion in any of the references regarding how or why to modify the Stewart system such that the inlet is provided at the circuit free side. Only through impermissible hindsight reconstruction, using applicants' invention, would one find motivation to modify the Stewart device to have all of the claimed features.

Applicants submit that the Office Action has improperly used applicants' invention as a road map to pick and choose features from different sources and piece the chosen features

together to arrive at the claimed invention, even though the references do not provide any teachings, suggestion or motivation to make the combination.

Applicants respectfully submits that independent claims 25, 30, 35, 40, 41, 42, 43 and 44 are allowable, for at least the reasons set forth above, over Mawatari, Stewart and Niki. Applicants further respectfully submit that dependent claims 13-15, 18-22, 24, 26-29, 31-34, 36-39, 45, 46, and 50-55 are also allowable by virtue of their dependency, for at least the reasons set forth above and the additional feature(s) they recite. Accordingly, withdrawal of the rejection of claims 13-15, 18-22, 24-46 and 50-55 under 35 U.S.C. §103(a) is respectfully solicited.


II. CONCLUSION

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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